



## PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of )  
Parvanthanathan Subrahmanya ) For: ADAPTING OPERATION OF A  
Serial No. 10/632,411 ) COMMUNICATION FILTER  
Filed: August 1, 2003 ) BASED ON MOBILE UNIT  
Group No. 2661 ) VELOCITY

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants submit herewith, in accordance with 37 CFR § 1.98, the patents, publications and other information listed on the enclosed Form PTO-1449.

## CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

## MAILING

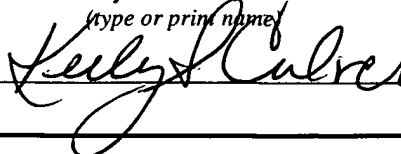
- ☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: March 4, 2004

## FACSIMILE

- ☐ transmitted by facsimile to the Patent and Trademark Office.

Depositor's Name: Keely Culver

(type or print name)  
Signature: 

The references submitted herewith are those of which Applicants are aware, which they believe may be material to the examination of this application and, with respect to which there may be a duty to disclose in accordance with 37 CFR § 1.56. While the references identified may be material to the examination of this application pursuant to 37 CFR § 1.56, the citation of these references is not intended to constitute an admission that any reference referred to herein is prior art to the invention of this application, unless specifically designated as such. Additionally, the filing of this Information Disclosure Statement shall not be construed to mean that any search has been made or, that if made, such search was complete or exhaustive, or that no other material information as defined in 37 CFR § 1.56 exists.

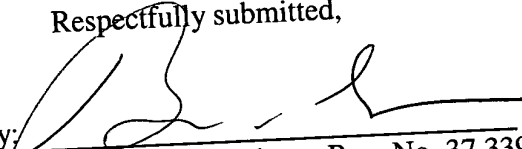
In accordance with 37 CFR § 1.97(b)(3), this Information Disclosure Statement is being submitted before mailing of the first Office Action on the merits.

A list of the references is set forth on Form PTO-1449, which is enclosed herewith, along with a copy of each cited reference (copies of U.S. references are not enclosed). Applicants respectfully request that the Examiner return to Applicants a copy of the Form PTO-1449 indicating consideration of the references cited thereon.

Applicants do not believe that any fees are due. If, however, it is determined that fees are owed, Applicants hereby authorize that such fees be charged to Deposit Account No. 17-0026.

Respectfully submitted,

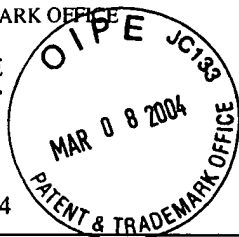
By:

  
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Dated: March 4, 2004

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|   |   |                          |
|---|---|--------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE<br>(REV. 7-80) PATENT AND TRADEMARK OFFICE  | ATTY. DOCKET NO.<br>020133              | SERIAL NO.<br>10/632,411 |
| INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br>(Use several sheets if necessary) | APPLICANT<br>Parvathanathan Subrahmanya |                          |
| DATE MAILED: March 4, 2004  | FILING DATE<br>August 1, 2003           | GROUP<br>2661            |



## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL | Ref<br>No | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB<br>CLASS | FILING DATE<br>IF APPRO-<br>PRIATE |
|---------------------|-----------|-----------------|------|------|-------|--------------|------------------------------------|
|                     | A1        |                 |      |      |       |              |                                    |
|                     | A2        |                 |      |      |       |              |                                    |
|                     | A3        |                 |      |      |       |              |                                    |
|                     | A4        |                 |      |      |       |              |                                    |
|                     | A5        |                 |      |      |       |              |                                    |

## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL | Ref<br>No | DOCUMENT NUMBER    | DATE     | COUNTRY | NAME                                 | CLASS | SUB<br>CLASS |
|---------------------|-----------|--------------------|----------|---------|--------------------------------------|-------|--------------|
|                     | B1        | 0 0 4 8 3 3 2 A1   | 08/17/00 | WO      | Ericsson Mobile Communications<br>AB | H04B  | 7/005        |
|                     | B2        | 0 3 0 1 5 3 6 4 A1 | 02/20/03 | WO      | Qualcomm Incorporated                | H04L  | 25/02        |
|                     | B3        |                    |          |         |                                      |       |              |

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)

|  |    |   |
|--|----|---|
|  | C1 | US 2002/0042279 A1, April 11, 2002, Da Rocha et al., 455/456  |
|  | C2 | Li et al: "An Adaptive Filtering Technique For Pilot Aided Transmission Systems", 1999 IEEE, XP 000204166, pages 507-512. |
|  | C3 | Oh et al: "An Adaptive Channel Estimation Scheme For DS-CDMA Systems", IEEE 2000, XP 001033051, pages 2839-2843           |
|  | C4 |   |

|   |                 |
|---|-----------------|
| EXAMINER  | DATE CONSIDERED |
| *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |